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FILE DISPLAY SYSTEM  
[Fairu no hyoji ho'shiki ]

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Specification

1. Title of Invention

File display system

2. Scope of Patent Claims

A system where the file in graduated layer form is displayed on the screen of a computer, this file consists of several upper position files displaying the large classification and several lower position files displaying the small classification, these are related to the above upper position files.

This file display system is characterized in that several upper position files are displayed on the aforementioned screen. One upper position file is selected from several upper position files. Several of the lower position file that are related to one of the upper position file are displayed in a row with the aforementioned upper position file on the screen of the computer. One lower position file is selected among several of the lower position files. In addition, the lower position file of the fine classification is displayed on the aforementioned screen. The files from all the graduated layer files are displayed in a row on the aforementioned screen.

3. Detailed explanation of the invention

(Industrial field of use)

The invention pertains to a file display system in a computer. In particular, it pertains to the display system of a directory such as a menu in a graduated layer structure.

(Prior Art)

The program and data that are stored in the memory of the computer are stored in certain classification in a graduated layer structure. During a call out in a screen, the call out is from the

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<sup>1</sup> Numbers in the margin indicate pagination in the foreign text.

large classification file to the fine classification file in the graduated layer form. The file shown below is explained as a menu.

Figure 4 shows the display state of the conventional graphic display. 1 is the graphic display screen. 2 is the graphic display of the large classification menu - portion (A<sub>1</sub>, A<sub>2</sub>, ..., A<sub>n</sub>). A<sub>i</sub> is the menu selected among the large classification menu - 2.

Figure 5 shows the menu - A<sub>i</sub> selected from the large classification menu - portion 2, the page is switched on the same screen 1, the intermediate classification menu - portion A<sub>i1</sub>, A<sub>i2</sub>, ..., A<sub>in</sub> are displayed. In addition, a desired menu is selected from the intermediate classification menu - portion A<sub>i1</sub>, A<sub>i2</sub>, ..., A<sub>in</sub>. For example, the intermediate portion of A<sub>i2</sub> can be displayed. A menu is displayed by switching the pages in each graduated layer.

/2

The conventional menu display method is a display of only one screen, the large classification or the intermediate classification menu - display portion 2, A<sub>i</sub>. Therefore, when the intermediate menu - A<sub>i</sub> is selected from the large classification menu - 2 of screen 1 of figure 4, the intermediate classification menu - A<sub>i</sub> of screen 1 in figure 5 is changed entirely.

That is, due to this menu selection, the menu - portion displayed on the screen is changed entirely for the whole menu.

(The problems resolved by the invention)

In the opening of the conventional menu, since the pages are switched for every menu graduated layers, the menu that is displayed on the screen at a particular time is only one graduated layer menu, the graduated menu that is before and after it are not displayed, there is the problem of the relationship for before and after that menu during operation.

The purpose of the invention is to resolve the above problems

and offer a file display system that is efficient in the menu - operation on the graphic display screen and the before and after relationship of the menu - graduated layer are clear in the menu opening.

(Means for resolving the problems)

In the invention, a system where the file in graduated layer form is displayed on the screen 1 of a computer, this file consists of several upper position files A1 - An displaying the large classification and several lower position files A11 - A1n displaying the small classification, these are related to the above upper position files A1 - An. This file display system is characterized in that several upper position files A1 - An are displayed on the aforementioned screen 1. One upper position file A1 is selected from several upper position files A1 - An. Several of the lower position files A11 - A1n that are related to one of the upper position file A1 are displayed in a row with the aforementioned upper position files A1 - An on the screen 1 of the computer. One lower position file A11 is selected among several of the lower position files A11 - A1n. In addition, the lower position file A111 - A11n of the fine classification is displayed on the aforementioned screen 1. The file from all the graduated layer file is displayed in a row on the aforementioned screen 1.

(Action)

The file graduated layers are displayed simultaneously on the screen 1 according to a selection from the upper position files A1 - An to the lower position files A11 - A1n. The before and after relationship of the graduated layer files can be viewed together so the file selection and modification operation can be advanced smoothly.

(Implementation example)

One implementation of the invention is explained below by

referring to the diagrams.

Now, figure 2 shows the menu structure of the graduated layer file, this graphic display is shown in the computer. In figure 2, A1, A2... An is the large classification menu of the upper position file, A11, A12... A1n, A11... are the intermediate menu of the lower position file. A111, A112... A11n are the small classification menu of the lower position file. That is, the intermediate classification menu - A11, A12, ..A1n are contained in one of the large classification menu - A1. Also, the small classification menu - A111, A112...A11n are contained in the intermediate menu - A11.

In figure 1, 1 is the screen for the graphic display.

5 is the display part of the large classification menu - A1, A2,... An of the graduated menu layer of figure 2.

6 is the display part of the intermediate classification menu - A11, A12,.. A1n of the graduated menu layer of figure 2. In this case, the large classification menu - A1 of the display part 5 is selected.

7 is the display part of the small classification menu - A111, A112,... A11n of the graduated menu layer of figure 2. In this case, the intermediate menu A11 of the display part 6 is selected.

In this implementation example, the operation of the graphic display screen 1 of figure 1 is carried out. First, the large classification menu - A1, A2,... An of figure 2 is displayed in the display part 5. Continuously, the small classification menu - A111, A112...A11n and the intermediate menu - A11, A12.. A1n are opened from the menu selection. Then, the display is at the display parts 6 and 7. That is, the menu screen is section off in each graduated menu layer, the whole selected graduated layer is displayed. Here, the large classification, the intermediate classification and the small classification becomes 3 graduated

layers. The setting of the display part pertaining to the menu - region can be modified according. Also, while the menu is displayed on the menu - screen, any menu can be moved.

/3

The action is explained next according to the flowchart in figure 3.

First, in step 301, the menu - A1, A2,...An defined as the large classification menu are displayed in a certain location on screen 1 (lower right corner). In step 302, the menu - A1 , the displayed large classification menu A1, A2... An are selected and inputted. In step 303, the selected menu - A1 is displayed in a different color. The intermediate menu - A11, A12,... A1n corresponding to the selected menu A1 is at step 304, this is displayed in a certain location on the screen (the middle right side). In step 305, any of the menu can be selected and inputted, the displayed menu - A11, A12.. A1n. In step 306, the selected menu A11 is displayed in a different color. In step 307, the small classification menu - A111, A112, ... A11n corresponding to the selected menu - A11 in step 307 is displayed in a certain location on screen 1 (upper right side).

In step 308, the small classification menu A is selected. In step 309, the menu - A111 is displayed in a different color. In step 310, the menu corresponding to this is processed.

Also, when the process of the small classification menu - A111 is completed, the process can be returned to any of the steps 302, 305 and 308. The large classification, the intermediate classification and the small classification menu displayed in screen 1 can be selected freely again. Also, at step 304, when the intermediate classification menu - A11, A12..,A1n are displayed on the screen, the large classification menu A1, A2.. An can be selected by returning to step 302. The small classification menu -

A111, A112,.. A11n is displayed on screen 1 at step 307, the process can be returned to any of the steps 302 or 305. The selection of the large classification and the intermediate classification is possible.

Furthermore, in the above implementation example, for the menu on the graphic display, other menu can be opened. Also, the file structure is not limited to the graduated layer structure of 3 layers, the small, intermediate and large file directory but several graduated layers can be used.

(Effect of invention)

According to the invention as explained above, a system where the file in graduated layer form is displayed on the screen of a computer, this file consists of several upper position files displaying the large classification and several lower position files displaying the fine classification, these are related to the above upper position files. This file display system is characterized in that several upper position files are displayed on the aforementioned screen. One upper position file is selected from several upper position files. Several of the lower position file that are related to one of the upper position file are displayed in a row with the aforementioned upper position file on the screen of the computer. One lower position file is selected among several of the lower position files. In addition, the lower position file of the fine classification is displayed on the aforementioned screen. The file from all the graduated layer file is displayed in a row on the aforementioned screen. This makes a more efficient file operation.

#### 4. Brief explanation of the diagrams

Figure 1 is the diagram showing the screen of the graphic display of the invention. Figure 2 shows the file structure of the graduated layers. Figure 3 is the flowchart explaining the action

of the invention. Figures 4 and 5 show the state of the screen for the conventional file display.

1 - screen, 5,6,7 - display part, A1-An - upper position file, A11 - An1 - lower position file, A111 - A11n - lower position file

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Figure 1

The file display of the invention

A1 - A1n: upper position file

A11 - An1: lower position file

A111 - A11n: lower position file

1 - screen

5,6,7 - display parts

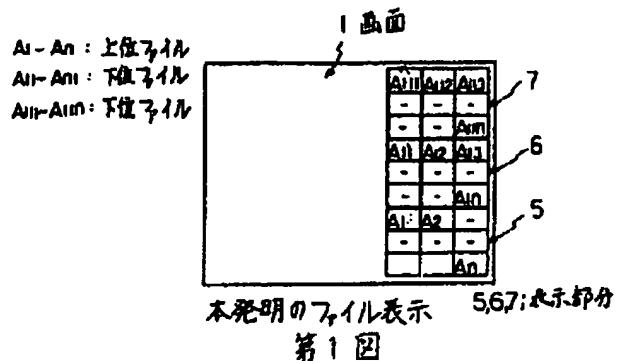
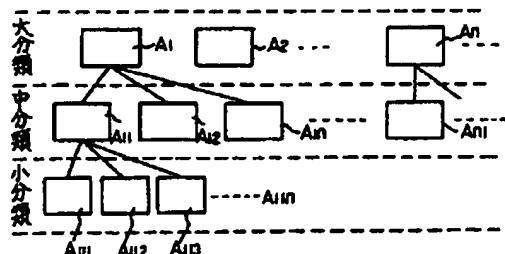


Figure 2

Large classification, A1, A2....An

Intermediate classification, A11, A12, A1n,....An1

Small classification, A111, A112, A113,...A11n



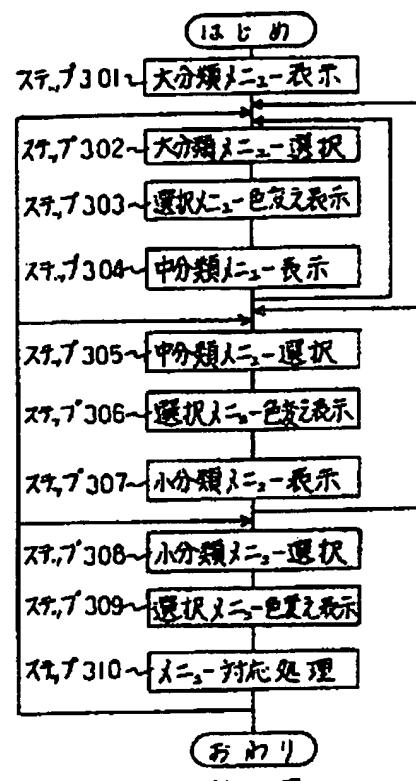
第2図

Figure 3

```

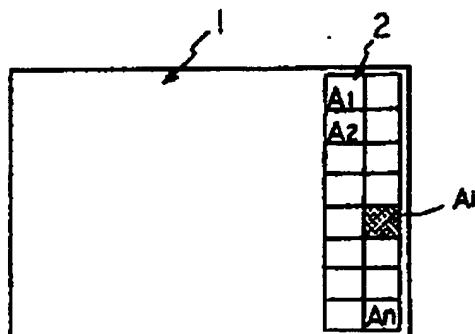
START
Step 301 - large classification
menu display
Step 302 - large classification
menu selection
Step 304 - intermediate menu -
display
Step 305 - intermediate menu -
selection
Step 306 - selection menu color
change display
Step 307 - small classification
menu display
Step 308 - small classification
menu selection
Step 309 - selection menu color
change display
Step 310 - menu - corresponding process
END

```



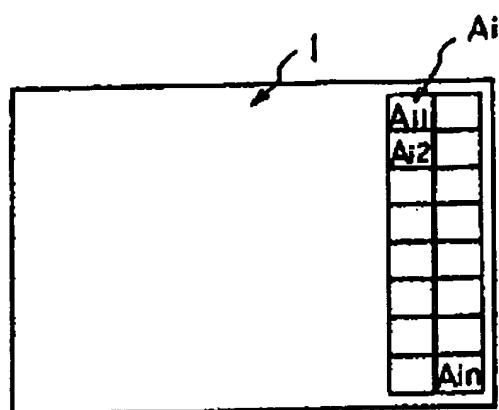
第3回

Figure 4



第4回

Figure 5



第5図